

To: Harris County Precinct Two Commissioner Adrian Garcia
From: Katie Short, Director; Amber Weed, Chief of Staff and Policy Director;
Amy Rose, Senior Analyst; Ramin Naderi, Analyst
CC: Mike Lykes, Kris Banks, Mohammed Jamal with Precinct Two; Gwen
Sims and Will Hudson with Harris County Public Health; Josh Stuckey,
Harris County Budget Management Department
Date: April 7, 2021
Re: **Monthly Memo on COVID-19 Vaccine Distribution, March 2021**

EXECUTIVE SUMMARY

In January 2021, Precinct Two requested the Analyst's Office produce a monthly memo regarding the distribution of COVID-19 vaccinations in Harris County. This is the third memo of a standing monthly memo the Analyst's Office will produce as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo provides an overview of the COVID-19 pandemic and vaccine distribution in Harris County. Key findings from the data in this memo include:¹

- Between December 14, 2020 and March 29, 2021, **all providers in Harris County administered a cumulative 1,636,041 vaccine doses.**
- As of March 29, 2021, **29% (1,020,644) of Harris County residents were vaccinated with at least one dose.**
- As of March 29, 2021, **546,051 individuals in Harris County were fully vaccinated**—15% of Harris County's eligible population; 12% of Harris County's total population.
- As of March 29, 2021, **Harris County received a weekly average of 13.6% of the State's vaccine dose allocation.** Based on this average rate of allocation, **Harris County is projected to receive 372,444 vaccine doses by May 3, 2021.**
- **Zip codes 77046 and 77032 have the smallest percent of the population vaccinated with at least one dose (8% and 10%, respectively).**
- **Zip codes 77008 and 77030 have the greatest percent of the population vaccinated with at least one dose (87% and 144%, respectively).**
- **The median of the median incomes of the ten Harris County zip codes with fewest percentage of the population vaccinated with at least one dose is \$39,823.**

¹ IMPORTANT NOTE: Not all data sums to totals reported. This is due to poor and inconsistent data reporting by providers, and because patients have not been required to disclose all demographic data. DSHS reports it is actively conducting county and provider-level analyses to identify if certain providers or areas are underreporting more than others for targeted data entry funding and training.

- The median of the median incomes of the ten Harris County zip codes with **the greatest percentage of the population vaccinated with at least one dose is \$78,298.**
- For all individuals who received a vaccine dose from a Harris County provider,
 - **6% (66,037) are 80 years old or older;**
 - **26% (265,616) are ages 65-79;**
 - **30% (302,898) are ages 50-64; and**
 - **38% (386,995) ages 16-49.**
- For all individuals who received a vaccine dose from a Harris County provider,
 - **35% (380,237) identify as White;**
 - **3% (27,796) identify as Multi-Race;**
 - **24% (261,136) identify as Hispanic;**
 - **10% (109,701) identify as Black;**
 - **10% (105,330) identify as Asian or Pacific Islander; and**
 - **0.3% (2,909) identify as American Indian or Alaskan Native.**
- **Between January 1, 2020 and March 29, 2021:**
 - **All providers in Harris County administered a cumulative 3,759,748 COVID-19 PCR tests;²**
 - **There were 375,570 positive COVID-19 cases confirmed by a PCR test in Harris County; and**
 - **There were 3,656 confirmed COVID-19 related deaths in Harris County.**

The Analyst's Office acknowledges Harris County Public Health for their significant contributions to this memo.

² PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

INTRODUCTION

In January 2021, Precinct Two requested the Harris County Commissioners Court's Analyst's Office (the "Analyst's Office") produce a monthly memo regarding the distribution of COVID-19 vaccinations in Harris County. This is the third memo of a standing monthly memo the Analyst's Office will produce as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo includes data and analysis regarding the COVID-19 vaccine dose distribution in Harris County. This memo expands on the previous publications (the January and February COVID-19 Vaccine Distribution memos) by including data relating to COVID-19 testing, cases, and deaths in Harris County, and Commissioner precinct-level analysis where available.

METHODOLOGY

Data utilized in this memo are from the Harris County Public Health Department; the Centers for Disease Control and Prevention (CDC); and from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS). Data reflect COVID-19 vaccine doses allocated and distributed in Harris County by all providers from the beginning of the vaccine rollout, December 14, 2020, through March 29, 2021, and all testing, confirmed cases, and COVID-related death data from January 1, 2020 through March 29, 2021.

Data Collected from Harris County Public Health (HCPH)

The majority of data in this memo was sent to the Analyst's Office from HCPH, which pulls data from the Texas Department of State Health Services (DSHS) ImmTrac2 system. As the Local Health Authority for the County, HCPH also pulls testing, confirmed cases, and COVID-related death data received from local health providers (including the City of Houston) and other sources. HCPH data aided in the development of Figures 1-6 and 8-12.

DSHS advised the following via email regarding the data available on DSHS:

- Providers in Texas have up to 24-hours to report doses administered in ImmTrac2, and the dashboard is updated by 4:00 pm with data reported as of 11:59 pm the previous night. This means there could be as much as a 48-hour lag between when a dose is administered and when it appears on ImmTrac2.

Data Collected from Texas Department of State Health Services (DSHS)

The Analyst's Office collected historical weekly County and State vaccine dose allocation data from Texas Department of State Health Services (DSHS) public COVID-19 dashboard. This data was used in the development of Figure 7.

Data Collected from Centers for Disease Control and Prevention (CDC)

The Analyst's Office collected data on the current federal distribution of both the Moderna and Pfizer-BioNTech vaccines and data on Social Vulnerability from the Centers for Disease Control and Prevention (CDC). This data was last collected on February 28, 2021, and was used for the reporting of current allocation of doses to the

State of Texas, which is used to develop a model for future distribution of vaccine doses to Harris County. This data aided with the development of Figure 7.

Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human caused threats, such as toxic chemical spills.³ The Social Vulnerability Index (SVI) was created by CDC and depicts the social vulnerability of communities, at census tract level, within a given county. SVI groups fifteen census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment. SVI data aided with the development of Figure 11.

Data Collected from Applied Technologies Location Analysis and Statistics (ATLAS). The Analyst's Office collected income data from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS). Income data reflects American Community Survey, 2018, five-year estimates -which aided with the development of Figure 11.

³ Centers for Disease Control (CDC) Social Vulnerability Index, a tool to identify socially vulnerable communities.

BACKGROUND

The spread of the novel coronavirus, the cause of COVID-19, began in the United States in early 2020. Since then, local health entities have tracked the testing, number of confirmed positive cases, and deaths related to COVID-19.

In December 2020, two-dose vaccines from two producers, Moderna and Pfizer-BioNTech, were authorized for emergency use from the US Food and Drug Administration (FDA). In February, FDA authorized Johnson and Johnson's one-dose vaccine for emergency use. AstraZeneca, another producer, may have a vaccine available for distribution in 2021, pending FDA approval.

For the bulk of the vaccine doses coming to Harris County, Texas, the federal government distributes COVID-19 vaccine doses to the Texas Department of State Health Services (DSHS), which distributes vaccine doses to local providers in Harris County. Any facility, organization, or healthcare provider licensed to possess or administer vaccine or provide vaccination services is eligible to enroll as a designated provider. Providers include: emergency services; health centers (community, federally qualified, migrant, rural); hospitals; long-term care; medical clinic/doctor's office; pharmacy; public health/government; federal long-term care; and other.⁴

From December 2020 to March 28, 2021 vaccines were made available for individuals in DSHS's Phase 1A (front-line health care workers and residents of long-term care facilities)⁵ and 1B (individuals ages 65+, and individuals ages 16+ with "at least one chronic medical condition that puts them at increased risk for severe illness from the virus that causes COVID-19").⁶

Beginning March 29, 2021, Texas expanded eligibility to include anyone over age 16. (All vaccines are authorized for people age 18 and older; the Pfizer vaccine is authorized for people age 16 and older.)⁷ The population of individuals ages 16 and older in Harris County is 3,533,350.⁸

⁴ Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Dashboard, Retrieved March 29, 2021, from https://tabexternal.dshs.texas.gov/t/THD/views/COVID-19VaccineinTexasDashboard/PeopleVaccinated?%3Aorigin=card_share_link&%3Aembed=y&%3AisGuestRedirectFromVizportal=y

⁵ Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1 Definition

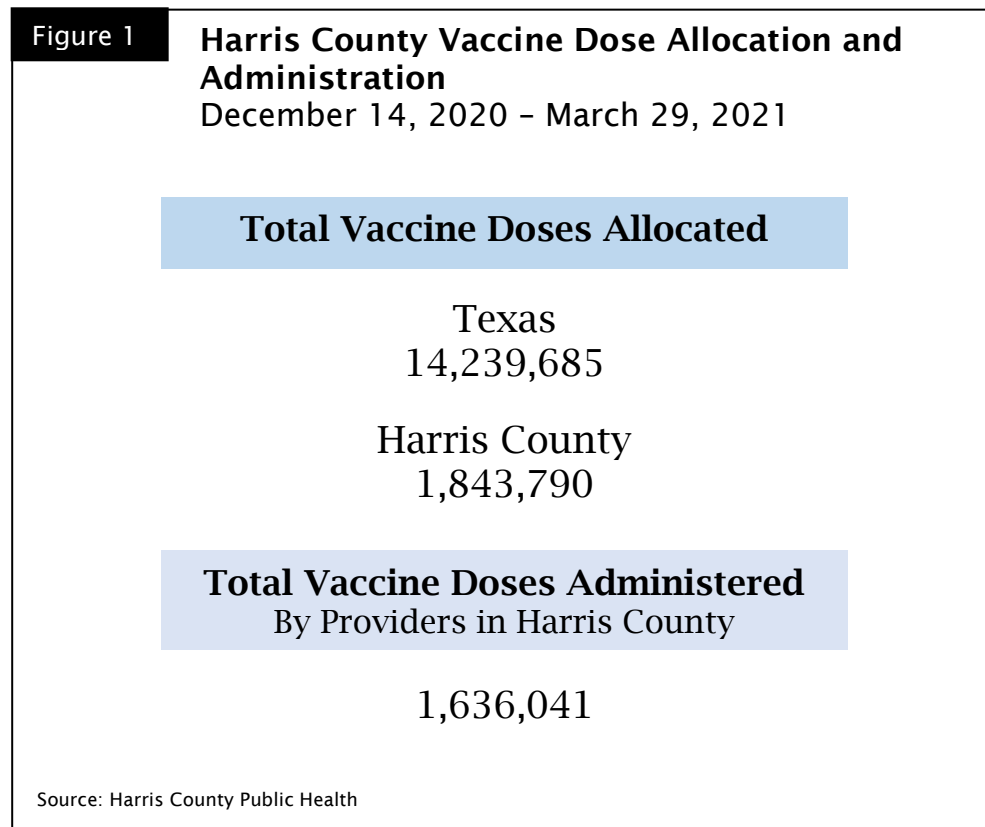
⁶ Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1B Definition

⁷ Department of State Health Services (DSHS) COVID-19 Vaccine Information, Retrieved March 29, 2021, from <https://www.dshs.state.tx.us/coronavirus/immunize/vaccine.aspx>

⁸ U.S. Census Bureau QuickFacts: Harris County. (n.d.). Retrieved March 29, 2021, from <https://www.census.gov/quickfacts/fact/table/harriscountytexas/PST045219>

TOTAL VACCINE DOSE ALLOCATION AND ADMINISTRATION

Figure 1 notes the total number of vaccine doses allocated to Texas, Harris County, and the total number of vaccine doses administered by providers in Harris County.



Between December 14, 2020 and March 29, 2021, the Centers for Disease Control and Prevention allocated a total of 14,239,685 million vaccine doses to the State of Texas. The Texas Department of State Health Services (DSHS) allocated **1,843,790 of those vaccine doses to providers in Harris County.**

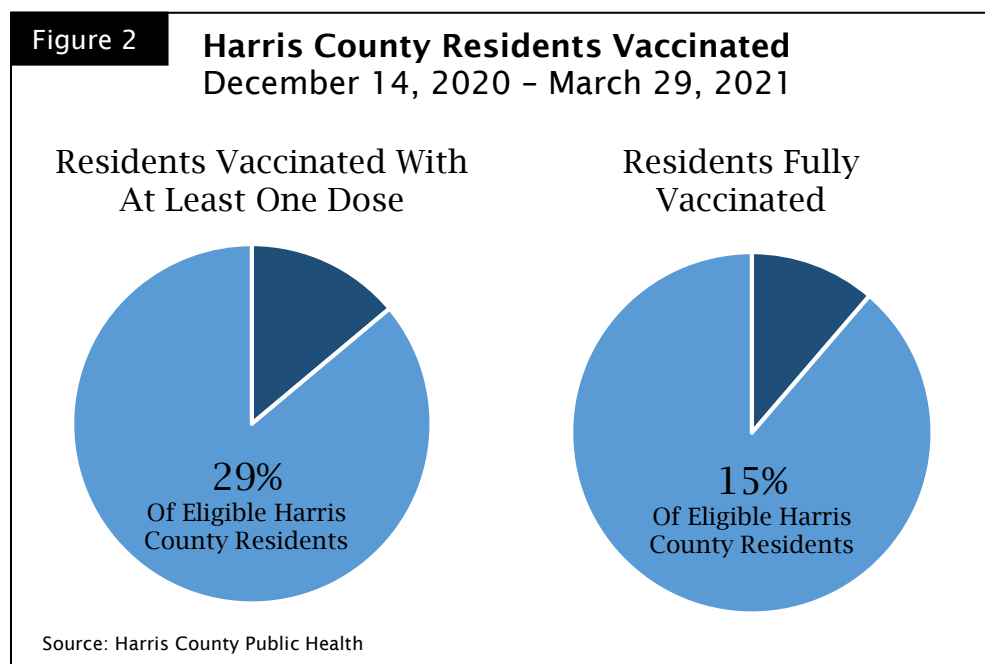
Of those 1,843,790 vaccine doses, **1,636,041 doses were administered by providers in Harris County.**⁹

⁹ The discrepancy between the doses allocated to Harris County and doses administered by Harris County providers may be due to a delay in reporting, some doses being held in storage, and some given to other partners for distribution.

HARRIS COUNTY RESIDENTS VACCINATED

Figure 2 presents the total number of vaccine doses allocated to residents in Harris County. In contrast, the total vaccine doses administered by Harris County providers reported in Figure 1 includes doses for Harris County residents as well as individuals who report not being Harris County residents.

While the State of Texas severely limited vaccine distribution prior to March 29, 2021, the State opened eligibility to all residents ages 16 and older on March 29, 2021. This memo evaluates eligibility using the definition from the March 29, 2021 order.



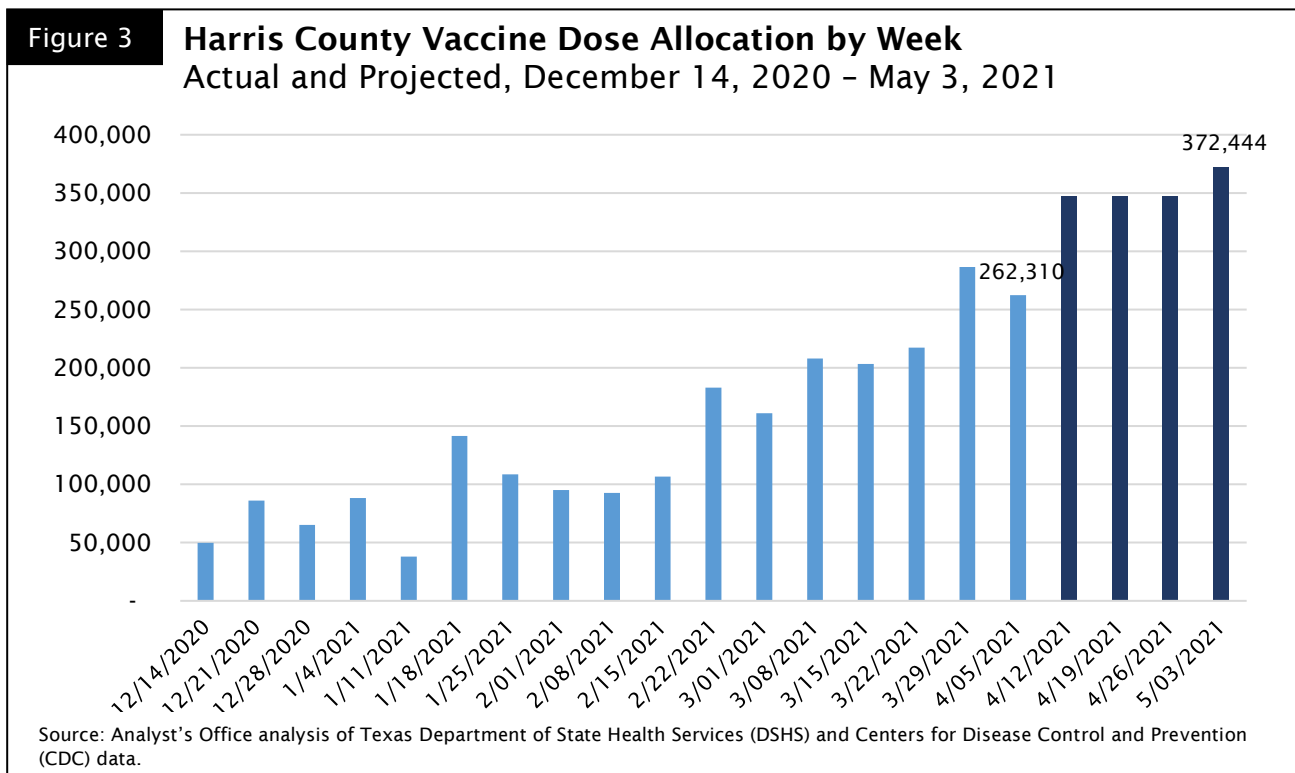
A total of 1,020,644 individuals living in Harris County have received at least one vaccine dose (29% of Harris County's eligible population; 22% of Harris County's total population).¹⁰

And 546,051 individuals in Harris County are fully vaccinated—meaning they have received both doses of either the Moderna or Pfizer vaccines or a single dose of Johnson and Johnson's vaccine (15% of Harris County's eligible population; 12% of Harris County's total population).

¹⁰ Eligible individuals include individuals ages 16 and over. This population is estimated to be 3,533,350 in Harris County.

VACCINE DOSES ALLOCATED TO HARRIS COUNTY PROVIDERS

Figure 3 presents the total number of vaccine doses allocated (actual and projected) to all approved providers in Harris County.



The federal and state vaccine distribution strategies have shifted since early December 2020, accounting, in part, for the significant changes in the number of total doses distributed to providers in Harris County from week to week.

Prospective vaccine providers must apply for approval to distribute COVID-19 vaccines through the Texas Department of State Health Services (DSHS). Approved providers include the following organization types, as categorized by DSHS: emergency services; health centers (community, federally qualified, migrant, rural); hospitals; long-term care; medical clinic/doctor's office; pharmacy; public health/government; federal long-term care; and other.

Figure 3 reflects the actual total number of vaccine doses allocated to all providers in Harris County between December 14, 2020 (Week 1) and March 29, 2021 (Week 16), and the projected number of allocations for April 5, 2021 (Week 17) through May 3, 2021 (Week 21). The projected vaccine dose allocations assume the average historical rate of distribution by the federal government to the State of Texas and State of Texas to Harris County. The figures are produced and updated using publicized DSHS vaccine distribution information. **As of March 29, 2021, Harris County received a weekly average of 13.6% of the State's vaccine dose allocation.**

PERCENT OF POPULATION VACCINATED BY ZIP CODE

Figure 4 presents the percentage of population vaccinated with at least one dose by zip code. Each zip code includes the median income and Social Vulnerability Index (SVI) score. The figure shows the ten Harris County zip codes with the least percentage of the population vaccinated and the ten Harris County zip codes with greatest percentage of the population vaccinated.¹¹

Figure 4 Percentage of Population Vaccinated With At Least One Dose by Zip Code, Median Income, and SVI December 14, 2020 - March 29, 2021			
Zip Codes With Fewest Percentage of People Vaccinated			
Zip Code	% Vax	Median Income	SVI
77060	8%	\$30,342	0.94
77032	10%	\$30,855	0.99
77081	10%	\$54,489	0.81
77067	12%	\$41,859	0.79
77013	12%	\$39,766	0.98
77506	12%	\$38,311	0.95
77090	12%	\$39,879	0.70
77076	12%	\$37,072	0.86
77036	13%	\$125,781	0.93
77037	13%	\$42,906	0.69
Zip Codes With Greatest Percentage of People Vaccinated			
Zip Code	% Vax	Median Income	SVI
77008	45%	\$68,204	0.08
77059	45%	\$66,983	0.05
77019	46%	\$103,478	0.09
77401	47%	\$50,665	0.03
77005	47%	\$74,792	0.03
77098	50%	\$95,835	0.07
77056	54%	\$50,485	0.14
77024	57%	\$104,167	0.16
77046	87%	\$81,803	0.10
77030	144%	\$116,920	0.28

Moderate High Vulnerability
 Highest Vulnerability
 Lowest Vulnerability
 Moderate Low Vulnerability

Source: American Community Survey (ACS) 2018 5-year estimates downloaded from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS), Centers for Disease Control (CDC), and Harris County Public Health

The median of the median incomes of the ten Harris County zip codes with the **fewest percentage of the population vaccinated with at least one dose** is \$39,823. The median of the median incomes of the ten Harris County zip codes with **greatest percentage of the population vaccinated with at least one dose** is \$78,298.¹²

Social Vulnerability describes a community's ability to prevent human suffering and financial loss in the event of disaster (such as a hurricane or disease outbreak).¹³ SVI rankings are based on percentiles valuing in range from 0 to 1 (with higher values indicating greater vulnerability). SVI data is often presented using quartile classification. This analysis utilizes CDC's SVI classifications as follows: 0-0.25 (lowest vulnerability); 0.2501-0.5 (moderate low); 0.5001-0.75 (moderate high); and 0.7501-1 (highest vulnerability). Figure 11 ranks zip codes within Harris County to enable mapping and analysis of relative vulnerability in comparison to the rest of Texas. For example, a zip code with a SVI ranking of 0.85 signifies that 85% of census tracts in Texas are less vulnerable and 15% are more vulnerable than the zip code selected.

¹¹ Note: Significantly large numbers of residents who were administered a vaccine in zip codes 77030 report living at the same address. HCPH suggests that this discrepancy may be caused by hospital staff entering the same address for employees to speed up the vaccination process.

¹² Analysis excludes zip codes with small percentage of land mass in Harris County and zip code 77507 which encompasses the Bayport Industrial District, a large commercial real-estate development area of Pasadena with no income data available.

¹³ Centers for Disease Control (CDC) SVI 2016 Documentation

INDIVIDUALS VACCINATED BY CENSUS TRACT POPULATION

Figure 5 presents the percent of the population vaccinated with at least one vaccine dose, by census tract, and Table 1 presents the number of residents vaccinated with at least one vaccine dose by Commissioner Precinct.

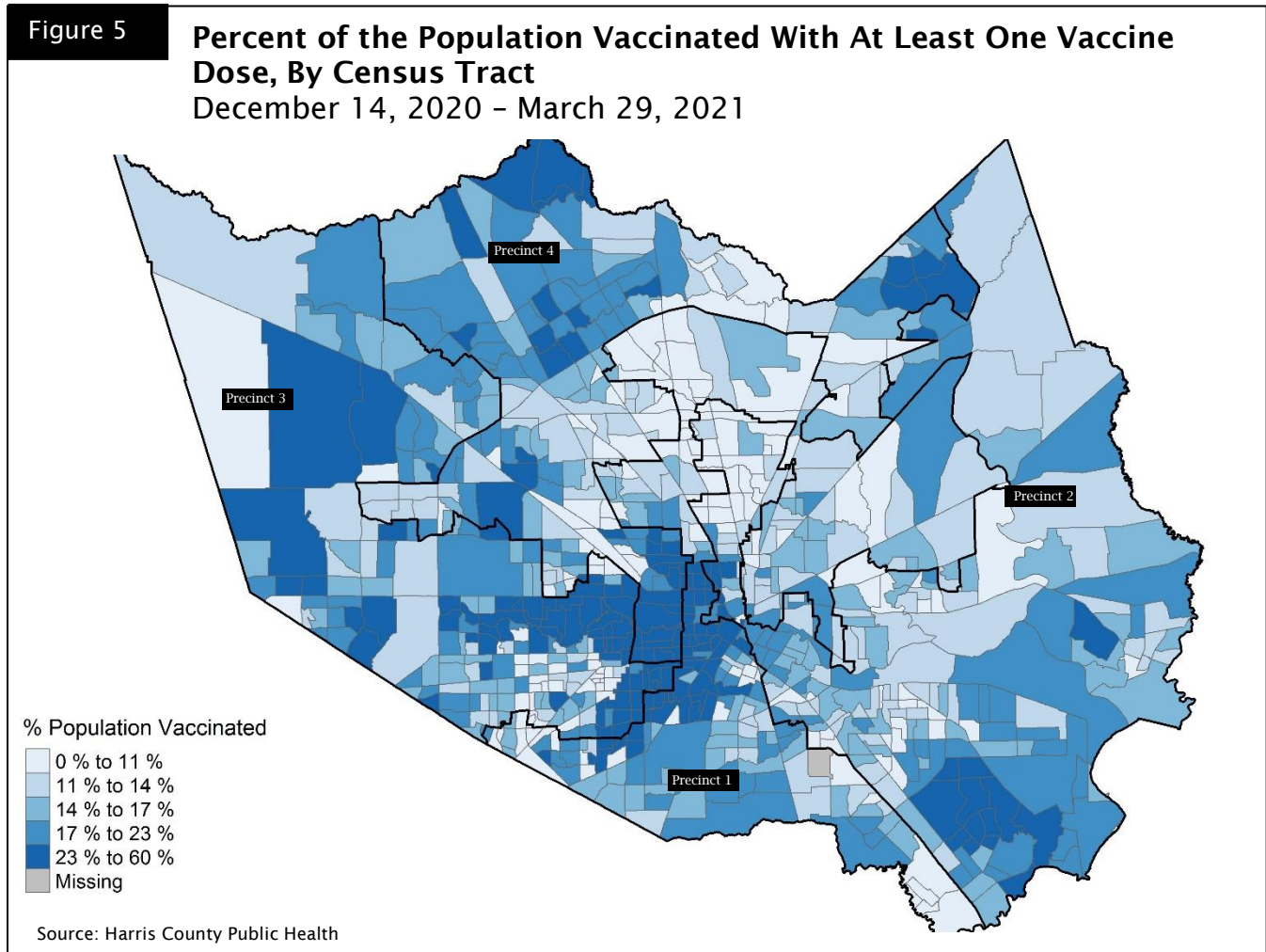


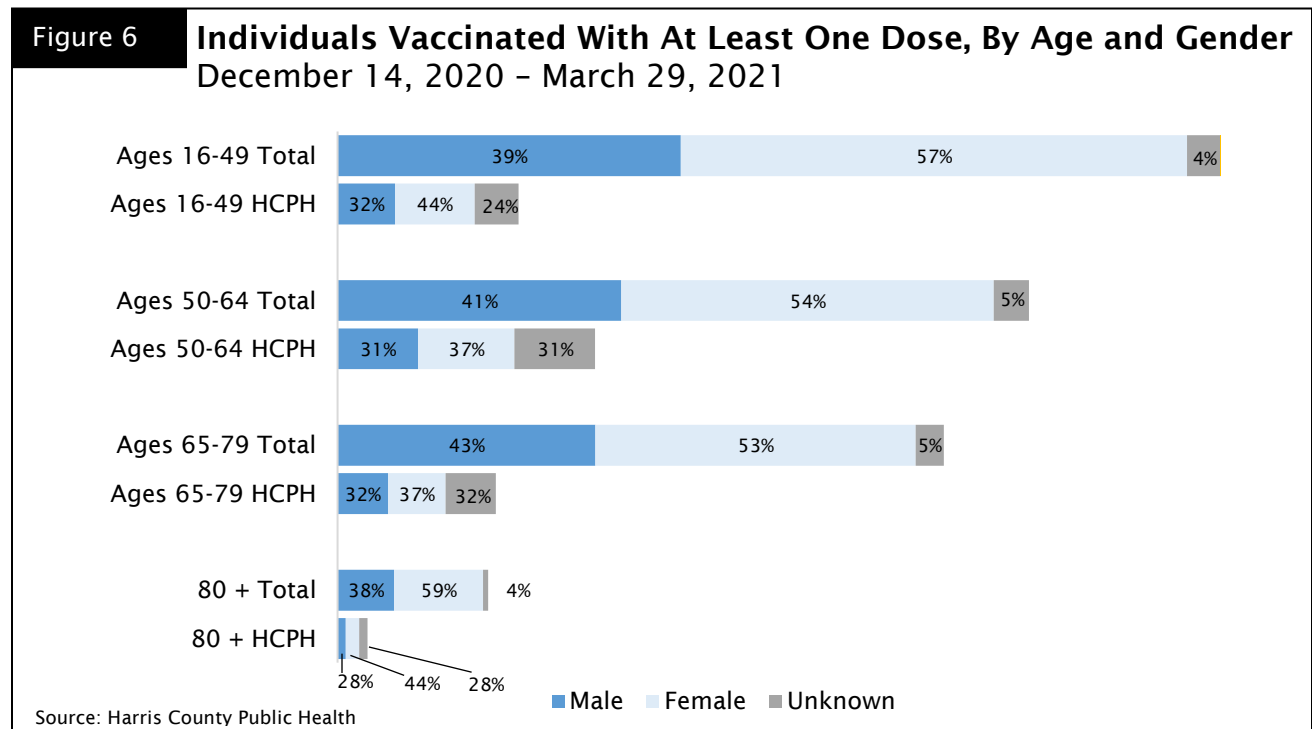
Table 1

Harris County Residents With At Least One Vaccine Dose by Commissioner Precinct and for Harris County, December 14, 2020 – March 29, 2021									
Precinct 1		Precinct 2		Precinct 3		Precinct 4		TOTAL ¹⁴	
People Vaccinated	% of Precinct Pop.	People Vaccinated	% of Precinct Pop.	People Vaccinated	% of Precinct Pop.	People Vaccinated	% of Precinct Pop.	People Vaccinated	% of County Pop.
180,977	15.7%	148,965	13.4%	221,544	17.5%	195,061	16.1%	1,020,644	22%

¹⁴ Excludes 274,097 people who have addresses that are unknown, non-geocodeable, or who have administrative addresses listed (such as a hospital).

INDIVIDUALS VACCINATED BY AGE AND GENDER

Figure 6 presents all individuals vaccinated by providers in Harris County and those vaccinated by Harris County Public Health (HCPH), by the individual's age and gender. This analysis is not limited to residents of Harris County.



Of the 1,020,644 individuals who have been vaccinated with at least one dose by a Harris County provider, 40% (412,509) of recipients are male; 55% (564,266) are female; 0.004% (43) identify as “other”; and 4% (44,771) are recorded as unknown gender.¹⁵

A total of 38% (386,995) of individuals vaccinated are between the ages 16-49. Of this population, 39% (150,354) are male; 57% (221,801) are female; 35 identify as “other”; and 4% (14,840) are recorded as gender unknown. For context, 50% of the County are between ages 15-49; 50% are male and 50% are female.¹⁶

A total of 30% (302,898) of individuals vaccinated are between the ages 50-64. Of this population, 41% (124,358) are male; 54% (163,213) are female; 8 identify as “other”; and 5% (15,327) are recorded as gender unknown. For context, 17% of the County are between ages 50-64; 49% are male and 51% are female.

A total of 26% (265,616) of individuals vaccinated are between the ages 65-79. Of this population, 43% (113,019) are male; 53% (140,321) are female; and 5% (12,276) are recorded as gender unknown. For context, 9% of the County are between ages 65-79; 46% are male and 54% are female.

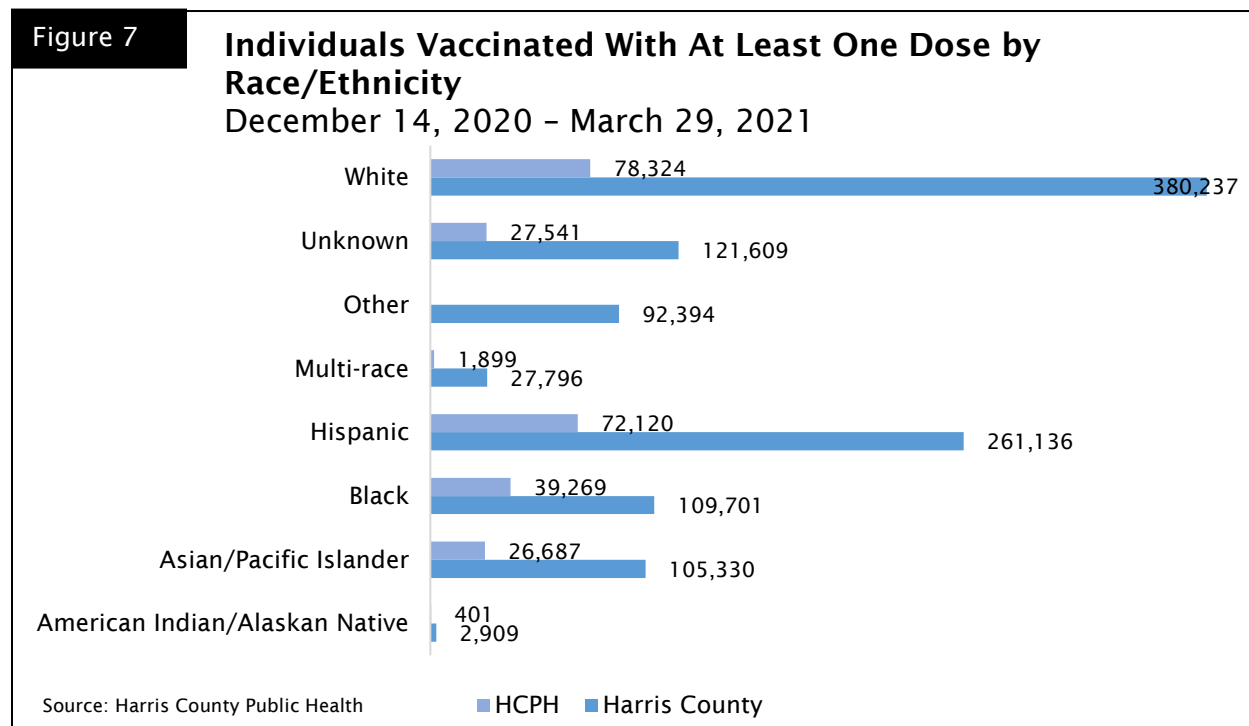
¹⁵ Note: Age and gender totals do not sum to vaccine doses administered totals due to some records having incomplete or incorrect data.

¹⁶ U.S. Census Bureau Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2010 to July 1, 2019. Retrieved April 7, 2021, from <https://www.census.gov/newsroom/press-kits/2020/population-estimates-detailed.html>. Note: Due to data limitations, figure includes 15 years old individuals.

A total of 6% (66,037) of individuals vaccinated are 80 years old or older. Of this population, 38% (24,778) are male; 59% (38,931) are female; and 4% (2,328) are recorded as gender unknown. For context, 2% of the County are 80 years old or older; 39% are male and 61% are female.

INDIVIDUALS VACCINATED BY RACE AND ETHNICITY

Figure 7 reflects the race and ethnicity of residents who received at least one vaccine dose from a provider in Harris County and by Harris County Public Health (HCPH).



Of the residents vaccinated with at least one dose by any provider in Harris County:¹⁷

- **35% (380,237) identify as White;** those vaccinated by HCPH only, 32% (78,324) identify as White, and for context, 28.9% of the County identifies as White;
- **11% (121,609) are recorded as Unknown;** those vaccinated by HCPH only, 11% (27,541) are recorded as Unknown;
- **8% (92,394) identify as Other** (HCPH does not record “Other”);
- **3% (27,796) identify as Multi-Race;** those vaccinated by HCPH only, 1% (1,899) identify as Multi-Race, and for context, 1.6% of the County identifies as Multi-Race;
- **24% (261,136) identify as Hispanic;** those vaccinated by HCPH only, 29% (72,120) identify as Hispanic, and for context, 43.3% of the County identifies as Hispanic;
- **10% (109,701) identify as Black;** those vaccinated by HCPH only, 16% (39,269) identify as Black, and for context, 18.7% of the County identifies as Black;
- **10% (105,330) identify as Asian or Pacific Islander;** those vaccinated by HCPH only, 11% (26,687) identify as Asian or Pacific Islander, and for context, 7.1% of the County identifies as Asian, Pacific Islander, or Native Hawaiian; and
- **0.3% (2,909) identify as American Indian or Alaskan Native;** those vaccinated by HCPH only, 0.2% (401) identify as American Indian or Alaskan Native, and for context, 0.2% of the County identifies American Indian or Alaskan Native.

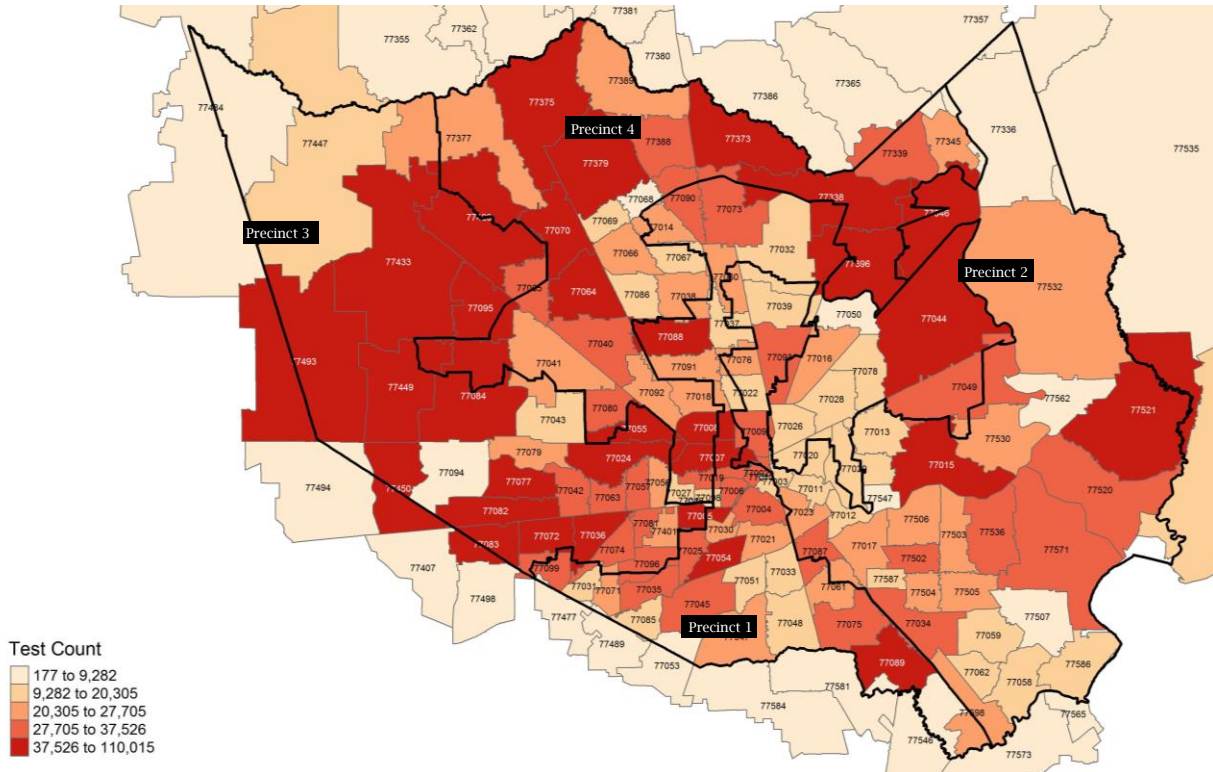
¹⁷ Note: Prior to February 4, 2021, providers were not required to report race/ethnicity when reporting doses to Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race/ethnicity to a provider.

COVID-19 TESTS BY ZIP CODE AND PRECINCT

Figure 8 presents the total number of COVID-19 polymerase chain reaction (PCR) tests administered to Harris County residents by all providers in Harris County by zip code, and Table 1 presents the number of COVID-19 PCR tests administered by Commissioner Precinct.¹⁸

Figure 8

COVID-19 Tests Administered By Recipient Zip Code and Precinct January 1, 2020 – March 29, 2021



Source: Harris County Public Health

Between January 1, 2020 and March 29, 2021, providers in Harris County **administered 3,759,748 COVID-19 tests**. For a full list of tests administered by recipient zip code, see Appendix A.

Table 2

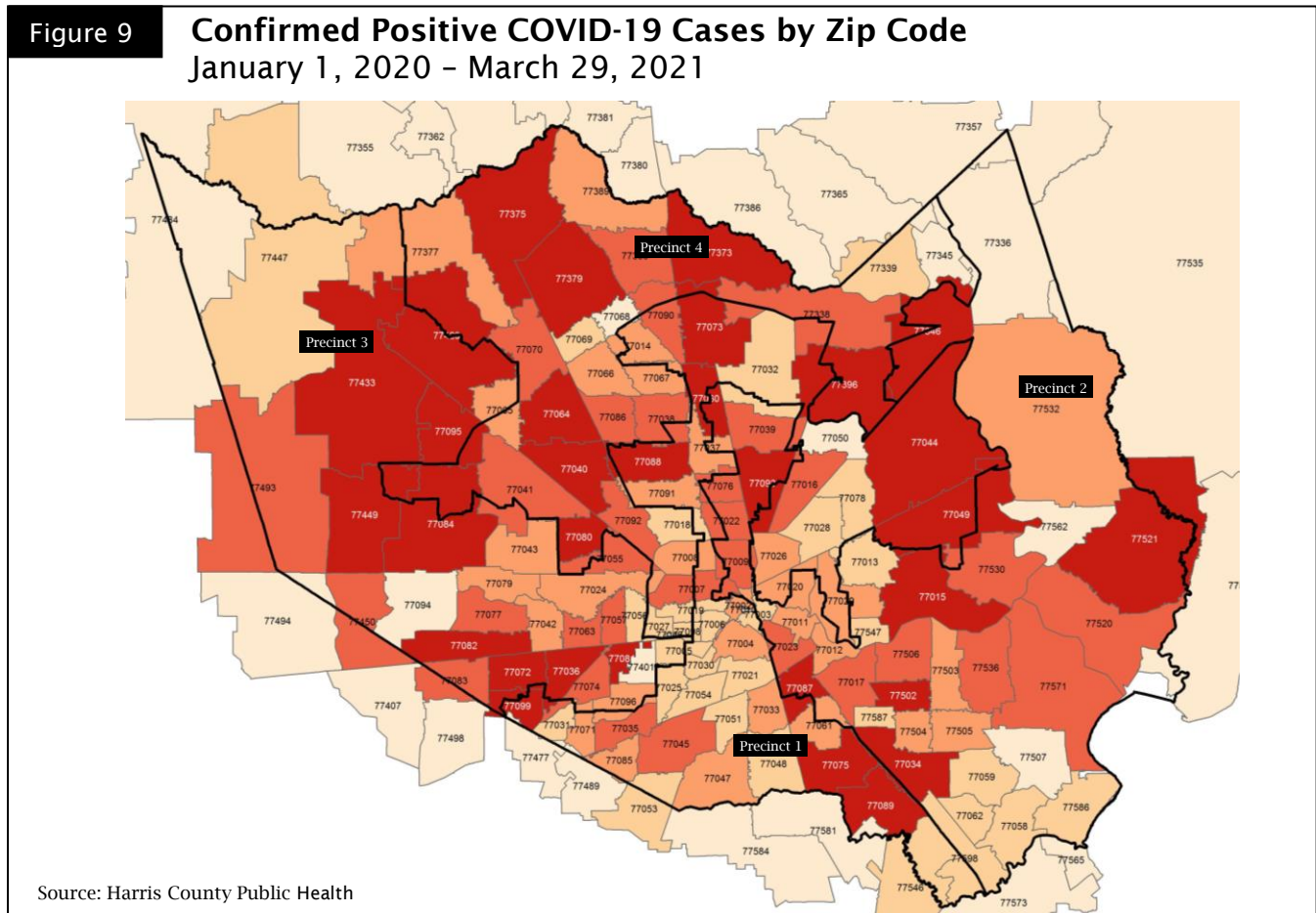
COVID-19 Tests Administered by Commissioner Precinct and for Harris County, January 1, 2020 – March 29, 2021

Precinct 1	Precinct 2	Precinct 3	Precinct 4	Total Tests
977,303	837,835	1,002,830	941,780	3,759,748

¹⁸ PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

CONFIRMED POSITIVE COVID-19 CASES BY ZIP CODE

Figure 9 presents the total number of COVID-19 positive cases confirmed by a PCR test in Harris County, reported by zip code and Commissioner Precinct.¹⁹



Between January 1, 2020 and March 29, 2021, there were **375,570 confirmed positive cases of COVID-19** in Harris County. For a full list of positive cases by zip code, see Appendix B.²⁰

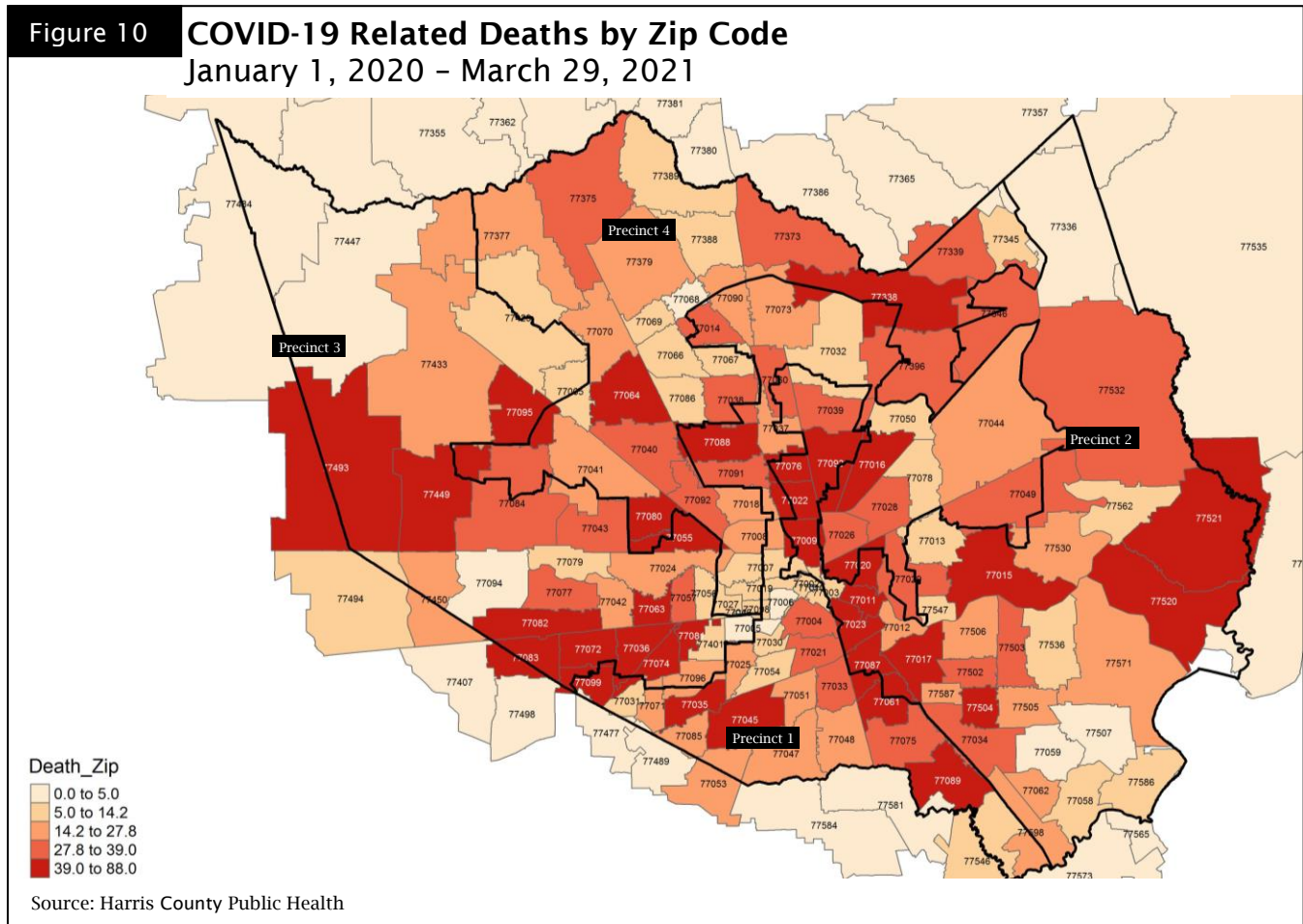
Precinct 1		Precinct 2		Precinct 3		Precinct 4		County	
Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of County Population
99,422	8.6%	94,211	8.5%	91,186	7.2%	87,838	7.3%	375,570	8.0%

¹⁹ PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

²⁰ Precinct totals do not sum to Total Cases because 2,913 confirmed cases have addresses that cannot be geo-coded into a Precinct.

CONFIRMED COVID-19 RELATED DEATHS BY ZIP CODE

Figure 10 presents the total number of confirmed COVID-19 related deaths in Harris County by zip code.



Between January 1, 2020 and March 29, 2021, there were **3,656 confirmed COVID-19 related deaths** in Harris County. For a full list of deaths by zip code, see Appendix C.²¹

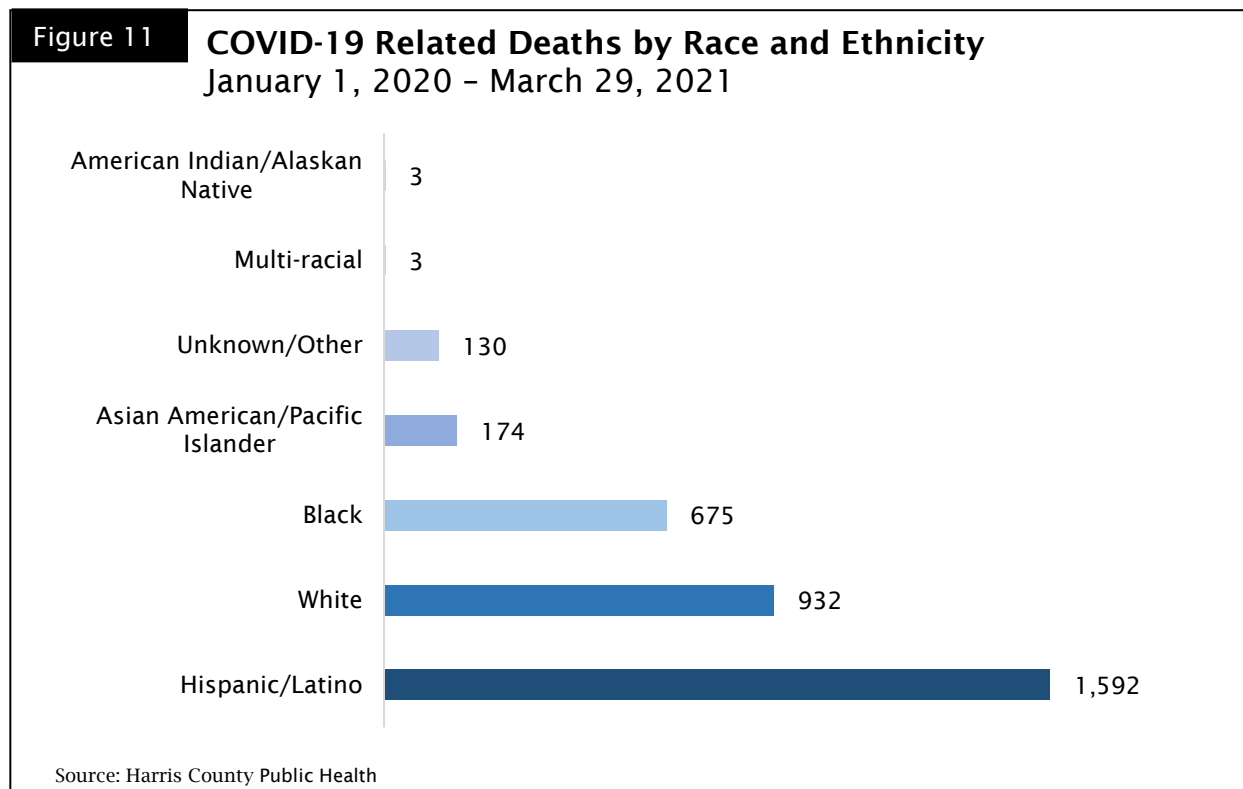
Table 4

COVID-19 Related Deaths by Commissioner Precinct and for Harris County, January 1, 2020 – March 29, 2021									
Precinct 1		Precinct 2		Precinct 3		Precinct 4		County Total	
Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population
1,079	0.09%	1,043	0.09%	847	0.07%	666	0.06%	3,656	0.08%

²¹ Precinct totals do not sum to Total Deaths because 21 deaths have addresses that cannot be geo-coded into a Precinct.

COVID-19 RELATED DEATHS BY RACE AND ETHNICITY

Figure 11 reflects the total number of confirmed COVID-19 related deaths in Harris County by race and ethnicity.²²



Of the 3,656 individuals in Harris County who died of a COVID-19-related death²³:

- **0.1% (3) identified as American Indian or Alaskan Native** (0.2% of the County identifies American Indian or Alaskan Native);
- **0.1% (3) identified as Multi-racial** (1.6% of the County identifies as Two or More Races);
- **3.7% (130) were recorded as Unknown or Other race and ethnicity;**
- **5% (174) identified as Asian or Pacific Islander** (7.1% of the County identifies as Asian, Pacific Islander, or Native Hawaiian);
- **19.2% (675) identified as Black** (18.7% of the County identifies as Black);
- **26.6% (932) identified as White** (28.9% of the County identifies as White); and
- **45.4% (1,592) identified as Hispanic** (43.3% of the County identifies as Hispanic).

²² Race and ethnicity totals do not sum to Total Precinct Deaths because 147 deaths do not have race and ethnicity data available.

²³ County-level race and ethnicity data are derived from US Census Bureau Population Estimates.

APPENDIX A

Total COVID-19 Tests Administered By Zip Code Ordered by Tests Administered, January 1, 2020 – March 29, 2021							
Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered
77565	177	77587	12,977	77504	23,550	77502	33,945
77362	246	77012	13,052	77023	23,990	77004	35,622
77381	269	77051	13,482	77071	24,124	77009	35,987
77382	313	77069	13,591	77532	24,227	77063	36,295
77380	408	77029	13,674	77505	25,005	77040	36,478
77010	632	77085	14,308	77056	25,516	77099	37,057
77354	637	77058	14,572	77018	25,897	77064	38,230
77507	638	77011	14,665	77017	26,422	77088	38,367
77355	797	77003	14,762	77377	26,755	77338	39,004
77477	854	77026	15,210	77389	27,010	77015	39,133
77386	1,018	77033	15,466	77079	27,052	77024	39,249
77535	1,028	77059	16,290	77506	27,116	77373	39,958
77489	1,119	77067	17,722	77041	27,416	77008	40,942
77581	1,333	77098	19,032	77047	27,631	77054	41,329
77357	1,479	77039	19,073	77520	27,723	77070	41,501
77053	1,612	77586	19,082	77081	27,728	77055	42,347
77498	1,649	77086	19,212	77045	28,006	77044	43,162
77573	1,984	77027	19,609	77093	28,120	77072	43,420
77046	1,990	77022	19,771	77042	28,233	77493	45,166
77365	2,207	77020	19,812	77025	28,748	77082	45,429
77584	2,244	77048	20,173	77065	29,511	77007	46,719
77407	2,252	77043	20,185	77536	29,635	77375	46,877
77546	2,826	77062	20,209	77035	29,685	77036	47,993
77050	3,048	77030	20,687	77087	29,926	77450	48,529
77494	3,156	77038	20,703	77002	30,005	77089	50,468
77562	5,610	77061	20,892	77019	30,209	77521	50,532
77484	6,055	77060	20,988	77080	30,515	77077	51,017
77094	7,320	77345	21,081	77006	30,634	77396	54,719
77547	7,637	77076	21,129	77073	30,825	77346	56,558
77068	8,000	77091	21,455	77096	30,838	77095	56,825
77336	8,619	77401	22,193	77571	30,996	77379	57,819
77523	9,724	77503	22,322	77034	30,997	77083	59,942
77078	10,242	77014	22,569	77075	31,036	77429	62,948
77013	10,511	77066	22,703	77090	32,440	77433	73,184
77031	11,174	77021	23,004	77339	32,512	77084	81,987
77032	11,239	77530	23,072	77057	32,594	77449	99,495
77028	12,044	77598	23,161	77388	33,001	77005	110,015
77037	12,243	77016	23,221	77049	33,008		
77447	12,672	77092	23,279	77074	33,814		

APPENDIX B

Total COVID-19 Confirmed Positive Cases By Zip Code Ordered by Positive Cases, January 1, 2020 – March 29, 2021

Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases
77565	1-5	77003	1,077	77008	2,354	77070	3,659
77362	1-5	77339	1,107	77061	2,363	77506	3,726
77355	1-5	77027	1,142	77033	2,377	77083	3,747
77535	1-5	77058	1,177	77504	2,401	77338	3,765
77381	1-5	77006	1,325	77067	2,473	77077	3,770
77382	1-5	77031	1,344	77091	2,473	77055	3,806
77354	6	77586	1,377	77503	2,497	77060	3,820
77380	9	77051	1,392	77014	2,522	77075	3,840
77386	11	77078	1,409	77042	2,538	77081	3,854
77573	16	77062	1,438	77065	2,539	77082	3,856
77357	18	77056	1,461	77532	2,593	77049	3,869
77365	20	77025	1,518	77020	2,597	77064	3,924
77498	23	77032	1,519	77047	2,643	77034	3,957
77407	40	77028	1,533	77066	2,664	77080	3,982
77507	41	77013	1,543	77057	2,742	77040	4,079
77010	43	77598	1,590	77035	2,752	77375	4,122
77584	53	77019	1,593	77016	2,760	77087	4,140
77523	66	77054	1,595	77063	2,770	77502	4,320
77581	106	77053	1,631	77022	2,806	77044	4,321
77046	130	77048	1,746	77092	2,824	77373	4,413
77477	155	77587	1,778	77571	2,834	77073	4,536
77484	200	77018	1,859	77450	2,854	77099	4,575
77050	350	77021	1,925	77536	2,870	77396	4,834
77494	383	77085	1,936	77041	2,907	77521	4,853
77489	506	77004	1,963	77007	2,943	77093	4,940
77094	551	77011	1,986	77039	2,994	77095	4,989
77562	600	77026	2,017	77090	3,045	77088	5,003
77336	632	77029	2,041	77023	3,078	77346	5,071
77345	632	77096	2,069	77086	3,092	77072	5,107
77401	803	77002	2,076	77038	3,098	77379	5,282
77068	807	77037	2,103	77530	3,182	77089	5,300
77059	831	77505	2,127	77045	3,188	77015	5,422
77030	876	77043	2,158	77520	3,224	77429	5,431
77098	890	77012	2,228	77009	3,333	77036	6,168
77546	949	77377	2,287	77076	3,420	77433	6,602
77447	1,010	77024	2,297	77388	3,448	77084	10,004
77069	1,023	77079	2,299	77074	3,480	77449	10,836
77005	1,038	77389	2,318	77017	3,614		
77547	1,067	77071	2,350	77493	3,644		

APPENDIX C

Total Confirmed COVID-19 Related Deaths By Zip Code Ordered by Number of Deaths, January 1, 2020 – March 29, 2021							
Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths
77565	1-5	77098	7	77018	22	77502	37
77362	1-5	77546	7	77505	22	77375	38
77381	1-5	77030	8	77571	22	77373	38
77382	1-5	77547	8	77450	22	77035	39
77355	1-5	77002	8	77433	22	77076	39
77535	1-5	77065	8	77042	23	77074	39
77354	1-5	77066	8	77090	23	77095	39
77380	1-5	77007	8	77506	23	77023	41
77386	1-5	77086	8	77044	23	77045	43
77573	1-5	77058	9	77598	24	77015	43
77357	1-5	77389	9	77070	24	77061	44
77365	1-5	77388	9	77530	25	77081	44
77498	1-5	77536	10	77008	26	77064	44
77407	1-5	77078	11	77012	27	77080	45
77507	1-5	77562	12	77028	28	77017	46
77010	1-5	77429	12	77021	28	77063	47
77584	1-5	77013	13	77043	28	77016	48
77523	1-5	77003	14	77029	29	77020	49
77581	1-5	77031	14	77084	29	77083	49
77046	1-5	77056	14	77004	30	77011	50
77477	1-5	77032	14	77038	31	77520	50
77484	1-5	77079	14	77346	31	77521	51
77050	1-5	77067	14	77339	32	77504	52
77494	1-5	77587	15	77039	32	77493	53
77489	1-5	77096	15	77033	33	77082	53
77094	1-5	77379	15	77532	34	77099	53
77336	1-5	77062	17	77092	34	77089	53
77401	1-5	77048	17	77060	34	77088	54
77068	1-5	77377	17	77026	35	77022	55
77059	1-5	77025	18	77057	35	77009	56
77447	1-5	77085	18	77077	35	77093	57
77069	1-5	77037	18	77014	36	77449	58
77005	1-5	77071	18	77075	36	77087	64
77027	1-5	77073	18	77049	36	77338	65
77006	1-5	77024	19	77040	36	77055	65
77345	6	77041	19	77396	36	77036	68
77586	6	77051	20	77091	37	77072	88
77019	6	77053	20	77503	37		
77054	6	77047	21	77034	37		

APPENDIX D

Percentage of Zip Code Vaccinated With At Least One Dose and Social Vulnerability Index (SVI) Ordered by Percentage Vaccinated, December 14, 2020 – March 29, 2021²⁴

Zip Code	Doses	SVI	Zip Code	Doses	SVI	Zip Code	Doses	SVI	Zip Code	Doses	SVI
77498	1%	0.33	77520	16%	0.82	77063	20%	0.57	77009	27%	0.62
77523	2%	0.26	77396	17%	0.51	77065	20%	0.43	77069	28%	0.22
77060	8%	0.94	77075	17%	0.61	77087	20%	1.00	77345	29%	0.05
77053	8%	0.72	77015	17%	0.76	77085	20%	0.60	77018	29%	0.48
77032	10%	0.99	77083	17%	0.53	77044	20%	0.41	77077	29%	0.29
77081	10%	0.81	77598	17%	0.57	77064	21%	0.47	77433	30%	0.11
77067	12%	0.79	77587	17%	0.91	77571	21%	0.38	77002	30%	0.42
77013	12%	0.98	77099	17%	0.80	77023	21%	0.76	77493	30%	0.34
77506	12%	0.95	77502	17%	0.89	77035	21%	0.74	77062	30%	0.19
77090	12%	0.70	77547	17%	0.66	77070	21%	0.49	77003	31%	0.61
77076	12%	0.86	77080	17%	0.83	77536	21%	0.44	77079	31%	0.27
77036	13%	0.93	77521	17%	0.64	77055	21%	0.68	77089	31%	0.47
77037	13%	0.69	77449	17%	0.36	77011	22%	0.96	77389	32%	0.14
77039	13%	0.73	77336	17%	0.30	77082	22%	0.54	77054	32%	0.26
77073	13%	0.50	77562	18%	0.63	77388	22%	0.13	77010	33%	0.02
77038	14%	0.50	77016	18%	0.89	77339	22%	0.32	77096	33%	0.39
77093	14%	0.97	77017	18%	0.66	77429	23%	0.06	77094	38%	-
77503	14%	0.82	77042	18%	0.38	77021	23%	0.74	77025	38%	0.32
77092	14%	0.75	77033	18%	0.93	77048	23%	0.85	77007	40%	0.01
77338	15%	0.58	77072	18%	0.87	77047	23%	0.55	77006	42%	0.09
77014	15%	0.78	77022	18%	0.97	77505	23%	0.24	77027	45%	0.01
77530	15%	0.59	77051	18%	0.80	77377	23%	0.24	77008	45%	0.08
77034	15%	0.67	77504	19%	0.88	77346	24%	0.12	77059	45%	0.05
77050	15%	0.71	77049	19%	0.63	77095	24%	0.23	77019	46%	0.09
77061	15%	0.70	77066	19%	0.59	77004	24%	0.53	77401	47%	0.03
77086	15%	0.78	77532	19%	0.37	77043	24%	0.52	77005	47%	0.03
77078	15%	0.89	77028	19%	0.84	77068	25%	0.43	77098	50%	0.07
77447	15%	0.45	77084	19%	0.36	77071	25%	0.68	77056	54%	0.14
77012	16%	0.99	77031	19%	0.64	77375	25%	0.45	77024	57%	0.16
77088	16%	0.77	77029	19%	0.88	77058	25%	0.46	77046	87%	0.10
77026	16%	0.94	77020	19%	0.89	77041	26%	0.31	77030	144%	0.28
77074	16%	0.86	77450	19%	0.18	77379	26%	0.21			
77373	16%	0.30	77040	19%	0.55	77057	27%	0.34			
77091	16%	0.92	77045	20%	0.84	77586	27%	0.18			

²⁴ Table excludes data for zip codes with large portions of Census Tracts in another County.

The Harris County Commissioners Court's Analyst's Office provides the Harris County Commissioners Court members with objective, nonpartisan, and timely fiscal and policy analysis related to the efficiency and effectiveness of various County operations.

This memo was prepared by Amy Rose, Senior Analyst, and Ramin Naderi, Analyst.

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